

"CONCRETE & CONSTRUCTIONAL ENGINEERING"

VOL. LIV FIFTY-FOURTH YEAR OF PUBLICATION 1959
 CONCRETE PUBLICATIONS, LTD., 14 DARTMOUTH STREET, LONDON, S.W.1.

INDEX

	PAGE
Accidents, Causes of	289
Aggregate, Expanded-shale	59
Plant for cooling	421
Aggregates and cement, Reaction between	258
Mathematical method of proportioning	
by K. W. Day	99
Air on strength of concrete, Effect of entrained	44
Airfield construction, Methods of	63
Arches, Construction with intersecting	384

AUTHORS:

Barts, Thomas A., on Frames with curved beams	115
Bartlett, R. J., on Corner columns	293
Cohen, Jacques S., on Helical staircases	197, 249, 313
Day, K. W., on Mathematical methods of proportioning aggregates	99
Douglas, A. H., on Elastic analysis of two-dimensional indeterminate frames	139, 175
Faber, John, on Chimney 350 ft. high at a cement works	363
Klasmer, H., on Restraint of slabs by edge-beams	227
Kluz, Thomas, on Fire-resistance of prestressed concrete	231
Krstic, M., on Doubly-curved shell roof in Belgrade	73
Manning, G. P., on Slabs for rectangular tanks	279
Müller, L. S., on Bending moments on interconnected beams	325
Scriven, W. E., on Construction of nomograms	263
Siechý, Ch., on Concrete tunnel-lining	105
Tokarski, E. W., on Application of the plastic-hinge method to a multiple-story frame	85
Turner, Leslie, on Design of chimneys to resist weight and wind	395
White, J. W., on Bending moments on continuous beams calculated by nomogram	245
Zalewski, W., on North-light shell roofs in Poland	131
Zielinski, J., on Losses of prestressing force	165, 241, 406

Bar spacers	392
Beams, Bending moments on inter-connected, by L. S. Müller	325
calculated by nomogram, Bending moments on continuous, by J. W. White	245
Frames with curved, by Thomas A. Barts	115
Repeated loading of	402
Restraint of slabs by edge, by H. Klasmer	227
with tensioned wires and mild steel	370
Bearings for bridges, Rubber	350
Belgrade, Doubly-curved shell roof, by M. Krstic	73

BOOK REVIEWS :

Advanced Structural Analysis, by S. F. Borg and J. J. Gennaro	336
Allgemeines Iterationsverfahren für Verschiebbliche Stabwerke, by R. Glatz	226
Allmän Teori för Beräkning av Armerad Betong, by H. Granholm	362
Ahnen om Alkali reaktioner i beton, by P. Nerenst Ausbetslen, Theorie und Berechnung von Blechen, by F. Kollbrunner und M. Meister	191
Bauforschung 1945-1958	407
Berechnung von Flächengründungen, by M. Kanz	242
Beton in chemisch angreifenden Wässern, by K. Seidel	362
Beton Précontraint, Vol. II, by Y. Guyon	190
Bewegungsfugen im Beton und Stahlbetonbau, by A. Kleinlogel	110
Civil Engineering Contracts and Organisation, by J. C. Maxwell-Cook	278
Das-Beton ABC, by A. Hummel	302
Das Kriechen unbewehrten Betons, by O. Wagner	98
Design of Prismatic Structures, by A. J. Ashdown of Shells, by A. Chronowicz	242
Dictionary of Civil Engineering, by J. S. Scott	98
Die zweiseitig gelagerte Platte, by H. Olsen and F. Reinitzhuber	407
Durchlaufträger, Rahmen und Platten, by J. Hahn	336

BOOK REVIEWS (contd.):

	PAGE
Einflussfelder für die Hauptträgerschnittkräfte zweistegiger Plattenbalkensysteme, by O. Kölner	336
Elementary Reinforced Concrete Design, by W. Morgan	110
Federzelanke, by K. Kammlüller and O. Jeske	121
Frost Resistance of Cement Paste, by U. Danielson and A. Wastesson	278
Guide to R.I.B.A. Forms of Contract, by D. Keating	302
Hardening of Concrete in Winter, by A. Nykänen and S. Pihlajavaara	191
Hudson Building Contracts, by E. J. Rimmer and I. W. D. Waller	336
Industrial Cooling Tower, by K. K. McKelvey and M. Brooks	110
Investigations of Danish Aggregates at the Building Research Station, by F. E. Jones	98
Kempe's Engineer's Year Book, 1959	98
Keskiseitsi Kuormituton Teräsbetoniseinän Lommahduslujus, by A. Ylinen	362
Linear Structural Analysis, by P. B. Morice	190
Mechanical Properties of Non-metallic Brittle Materials	278
Phillips Pavilion at the 1958 Brussels World Fair	161
Plastic Design of Steel Frames, by L. S. Beedle	278
Practical Problems in Soil Mechanics, by H. R. Reynolds and P. Protopapadakis	302
Prismatic and Cylindrical Shells, by D. Yitzhak	161
Reinforced Concrete Fundamentals, by P. Ferguson in Architecture, by A. A. Raafat Benjamin	190
Statically Indeterminate Structures, by J. R. Norris and others	362
Tests for Water for Making Concrete, B.S.	302
Vibration Engineering, by W. K. Wilson	416
Zehnteilige Einflusslinien für Durchlaufende Träger, by G. Anger	407
Zur Theorie und Berechnung von Schalentragwerken in Form gleichseitiger hyperbolischer Paraboloiden, by W. Bongard	110, 161
Bridge, Bridgwater, Somerset	45
Failure of a	128
Footpath added to stone	35
Lancaster	174
Moscow	170
Scotland	33
Worcestershire	16
works, Specification for road and	204
Bridges on London-Birmingham motorway	338, 413
on Luton-Rugby road	338
on St. Albans by-pass road	337
Rubber bearings for	350
Building in London, An early concrete	382
Calcium chloride on reinforcement, Effect of	150, 417
Cement, Accelerated test for	417
Delivery of loose	32
Reaction between aggregates and	258
Chimney at Ilford	273
350 ft. high at a cement works, by John Faber	363
500 ft. high	418
Chimneys for resistance to weight and wind, Design of, by Leslie Turner	395
Columns, Corner, by R. J. Bartlett	293
Concrete, Cost of placing stiff	125
Theory and practice of making	189
Cross, Professor Hardy	156
Dam, Avon	151
Damaged structures, Repairing	138
Design, Unnecessary accuracy in	1, 157, 96
Earthworks, B.S. Code for	290
EDITORIAL NOTES :	
Accelerated test for cement, An	323
Aids to design	261
Architects and contractors	1

EDITORIAL NOTES (contd.) :		PAGE
Architects and engineers		163
Calcium chloride on reinforcement, Effect of		71
Concrete, Theory and practice of making		103
Electronic calculating machines		229
Mathematics and design		129
Productivity, Increasing		393
Retiring, Thoughts on		357
"Traffic engineers": What's in a name?		195
Word is wanted, A: Competition		291
Electro-osmosis, Stabilisation of soil by		380
Entrained air on the strength of concrete, Effect of		440
Factory near Newcastle upon Tyne		11
Fire-testing station, Elstree		43
Flat, built in sixteen months		120
" East London		10
Floors, Poland; Precast flat-slab		371
" Shrinkage stresses in composite		110
Formers for hollow slabs, Plastic		385
Frame, Application of plastic-hinge method to a multiple-story, by E. W. Tokarski		85
" construction, Precast		42
Frames, Elastic analysis of two-dimensional indeterminate, by A. H. Douglas		139, 175
" of 132 ft. span, Precast		29
" with curved beams, by T. A. Barta		315
Framework for seven-story building, Precast		60
Garages, Parking		304
Hangars and workshop at London Airport		19
Hinges, Design of		121
Joints, Expansion		392
Laboratory in U.S.A., Structural		272
Library for science and technology		114
Lit-slab construction for a tall building for roof, Circular		381
" Lightweight concrete for bridge decks		383
Market, Plymouth, Covered		117
Measuring devices, Remotely-controlled		390
Metric conversion factors		244, 312
Mining subsidence, Effects of		259
Mixers, B.S. for concrete		349
" Water meters for concrete		228
Motorway, London-Birmingham		337, 413
Nigeria, Building in		30
Nomogram, Bending moments on continuous beams calculated by, by J. W. White		245
Nomograms, Construction of, by W. E. Scriven		263
Nuclear power station, Concrete at Berkeley		211
" radiation, Protection against		218
Office building in London, Sixteen-story		243
Pile-driving Frame, New		386
" New type of cast-in-place		415
Piles, Vibration caused by driving		185
Pipes, Flexible joint for concrete		257
" in U.S.S.R., Concrete		123
" Large concrete		356
Plastic-hinge method to a multiple-story frame, Application of, by E. W. Tokarski		85
Poland, North-light shell roofs in, by W. Zalewski		131
" Precast flat-slab floors in		371
Polystyrene as shuttering		282
Polythene for protection against the weather, Use of		356
Powder lances, Concrete demolished by		49, 282
Precast concrete in office building		47
PRESTRESSED CONCRETE		
Beams, Hollow bridge		303
" Production of		187
" with tensioned wires and mild steel		370
Bridge over the River Medway		408
" with large precast beams		46
Bunker, Precast		419
Columns 43 ft. high		3
Fatigue, Effect of		248
Fire-resistance		61
" by Thomas Kluz		231
Footbridges		111
Jetty, Erith		65
Losses of prestressing force, by Jerzy Zieliński		406
Notes on prestressed concrete, by H. Risch		387
Precast beams		219
" components		159
Road, Competition for an elevated		102
Sea-wall		81
Steel tensioned by loading		311
PAGE		
Precast concrete in school building		3
Pumping station near Boston, Land-drainage		50
Railway works at Barking		219
" at Ilford		273
Ready-mixed concrete plant		102
Recesses in concrete		102
Reinforcement, High-strength notched Protected		97, 335
Repairing damaged structures		392
Reservoir, Middlesbrough		138
" Monmouthshire		277
Road and bridge works, Specification for Chiswick, London, Elevated		204
" construction, Rapid		403
" Flexible		414
" Huntingdonshire, Experimental flexible		342
Roads, Elevated		353
Roof, Belgrave, Doubly-curved shell, by M. Krstic		378
" Hain, Doubly-curved		375
" of stadium supported by cables		311
" Paris, Large "shell"		307
" Plymouth, "shell"		117
" Precast cantilevered prismatic supported on frames, North-light		347
" trusses, Precast		28
Roofs, Circular lift-slabs for		383
" Factory with north-light		41
" Mexico, Doubly-curved		205
" of large span, Curved		171
" Poland, North-light, by W. Zalewski		131
Samuely, The late F. J.		84
Scaffold, Collapse of a		150
School, Cardiff		53
" Manchester		23
Shafts, Inflated tubes for forming		382
Shearing strength of reinforced concrete		346
Shrinkage stresses in composite floors		119
Shuttering, Glass-fibre		420
" Polystyrene as		282
" Supports for heavy		124
Slabs by edge-beams, Restraint of, by H. Klasmer		221
" Plastic formers for hollow		385
" Resurfacing		56
Soil by electro-osmosis, Stabilisation of		380
Staircase, Test of a		25
Stairs, Design of helical, by Jacques S. Cohen		197, 249, 283, 313
" with wooden treads, Helical		374
Steel strip-mill at Sheffield		37
Subsidence, Effects of mining		259
Tank, Large water		210
" to contain 600,000 gall. of petrol		351
Tanks, Slabs for rectangular, by G. P. Manning		279
" unsupported at the top, Walls of rectangular		345
Temperatures in concrete, Measuring		412
Tenders, Alteration of		418
Tremie, Effects of admixtures on concrete placed by		244
Tunnel-lining, Tests on, by Ch. Széchy		105
UNESCO headquarters, Paris		411
Vacuum process applied to hollow members		100
Vibrating roller		356
Wall slabs into position, Sliding		103
Walsh, The late H. N.		80
Water tower, Haifa		36
" Ilford		273
Wentworth-Shields, The late F. E.		218
Winder tower in Northumberland		24

